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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,394

10/17/2005

Kazuaki Tsuji

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1632

23165 7590 04/20/2007
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EXAMINER

LEE, GILBERT Y

ART UNIT

PAPER NUMBER

3673

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/549,394

Applicant(s)

TSUJI ET AL.

Examiner

Gilbert Y. Lee

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No: _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Examiner's Attachment A&B</u> . |

DETAILED ACTION

1. The amendment filed 10/12/06 has been entered.

Priority

2. The first sentence of the disclosure must disclose all priority documents, application numbers and publication numbers.

Claim Objections

3. The examiner is making an inquiry to claims 6-11 as to whether the applicant is claiming the subcombination of a sealing material as claimed in the preamble or the combination of an ant groove and sealing material. For the purposes of this examination, the examiner is interpreting the claims to be claiming only the subcombination of just a sealing material. Appropriate correction is required.
4. Claim 8 is objected to because of the following informalities: "said corner portion" should be changed to --said at least one corner portion--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Note for references A-K see Examiner's Attachment A.

5. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Frisch (US Patent No. 5,513,674).

Regarding claims 6-11, 13, and 14, the Frisch reference discloses a sealing material (10),

with the sealing material comprising:

an elastically deformable material (Col. 3, Lines 31-37); and

a sectional shape (Fig. 3) having: a straight bottom edge (A), with said straight bottom edge having a first (H) and a second (I) end; an arched convex edge (F); a first projecting edge (B and convex edge of element 17) which connects with said first end of said straight bottom edge (Fig. 3) and projects obliquely from said first end of said straight bottom edge (Fig. 3); a concave inlet portion (E) which is located between said first projecting edge and said arched convex edge (Fig. 3); a second projecting edge (C) which connects the second end of said straight bottom edge and is composed of a pair of straight lines (Examiner's Attachment A), with the second projecting edge projecting obliquely from said second end of said straight bottom edge (Fig. 3); a straight sloping edge (G) of which one end connects with an end of said arched convex edge that is opposite to said first projecting edge of which the other end connects with said second projecting edge (Fig. 3); and at least one corner portion (D) which is found in a range

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that extends from said straight bottom edge via said second projecting edge to said straight sloping edge (Fig. 3).

Regarding claim 7, the Frisch reference discloses the sealing material as claimed in claim 1. Note that because the ant groove is considered to be intended use, the sealing material of the Frisch reference is capable of fitting the equation of $X/B = 1.00-1.10$.

Regarding claim 8, the Frisch reference discloses the second projecting edge being formed by connecting a pair of straight edges (C) together at an angle (Fig. 3); and

The at least one corner portion being constituted in the following three places: a place between said straight bottom edge and said second projecting edge (e.g. at I); an elbow place of said second projecting edge (D); and a place between said second projecting edge and said sloping edge (J).

Regarding claims 9 and 11, the Frisch reference discloses a vertical edge (K) connecting said arched convex edge and said concave inlet portion together.

Regarding claim 10, the Frisch reference discloses the sealing material being formed into a ring shape (Col. 3, Lines 31-37), with the ring shape having an outer peripheral side (e.g. towards 13) and an inner (e.g. towards 14) peripheral side, with the sealing material comprising:

a structure such that said first projecting edge and said concave inlet portion are located at the outer peripheral side of the said ring shape (Fig. 3);

a structure such that said second projecting edge, said straight sloping edge, and said corner portion are located at the inner peripheral side of said ring shape (Fig. 3).

Note that because the ant groove is considered to be intended use, the sealing material of the Frisch reference is capable of having a peripheral length extended by 1-10% in a state fitted to said ant groove of the ring shape when compared with a free state of said sealing material.

Note for reference characters R-Z refer to Examiner's Attachment B.

6. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Dick (US Patent No. 2,438,153).

Regarding claim 12, the Frisch reference discloses a sealing material (16) for an ant groove (10) that is fitted to the ant groove made in a surface of either one of a pair of members (e.g. 1 and 3,4),

with the sealing material comprising:

an elastically deformable material (Col. 2, Lines 16-18); and

a sectional shape (Fig. 2) having: a straight bottom edge (Z) which is disposed on a bottom face of said ant groove (Fig. 1), with said straight bottom edge having a first (Y) and a second (X) end; an arched convex edge (W) which makes contact with the surface (1) of the member facing said ant groove (Fig. 1); a first projecting edge (V) which connects with said first end of said straight bottom edge (Fig. 2) and projects obliquely from said first end of said straight bottom edge (Fig. 2); a concave inlet portion (U) which is located between said first projecting edge and said arched convex edge

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(Fig. 2); a second projecting edge (T) which connects the second end of said straight bottom edge and is composed of straight lines, with the second projecting edge projecting obliquely from said second end of said straight bottom edge (Fig. 2); a straight sloping edge (S) of which one end connects with an end of said arched convex edge that is opposite to said first projecting edge of which the other end connects with said second projecting edge (Fig. 2); and at least one corner portion (R) which is found in a range that extends from said straight bottom edge via said second projecting edge to said straight sloping edge (Fig. 2);

wherein the ant groove comprises a substantially trapezoidal shape (e.g. portion of groove holding 17) in section; with the ant groove having an opening and a bottom opposite the opening, with the opening having a length running transversely to the sealing material, with the bottom having a length running transversely to the sealing material, and with the length of the bottom being greater than the length of the opening such that said ant groove is dovetail shaped in section (Fig. 1).

MPEP 2113 Product-by-Process Claims states that "If the product in the product-by-process claim is that same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process." The process by which the sealing material is inserted into the ant groove is made is not a patentable distinction. The Dick reference discloses the structural limitations of claim 6 and therefore would be capable of being inserted into the ant groove in the manner as claimed.

Response to Arguments

7. Applicant's arguments with respect to claims 6-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

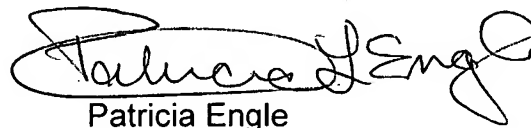
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GL
April 16, 2007

A handwritten signature in black ink, appearing to read "Patricia L. Engle", is written over a horizontal line.

Patricia Engle
Supervisory Examiner
Tech. Center 3600

Fig. 3

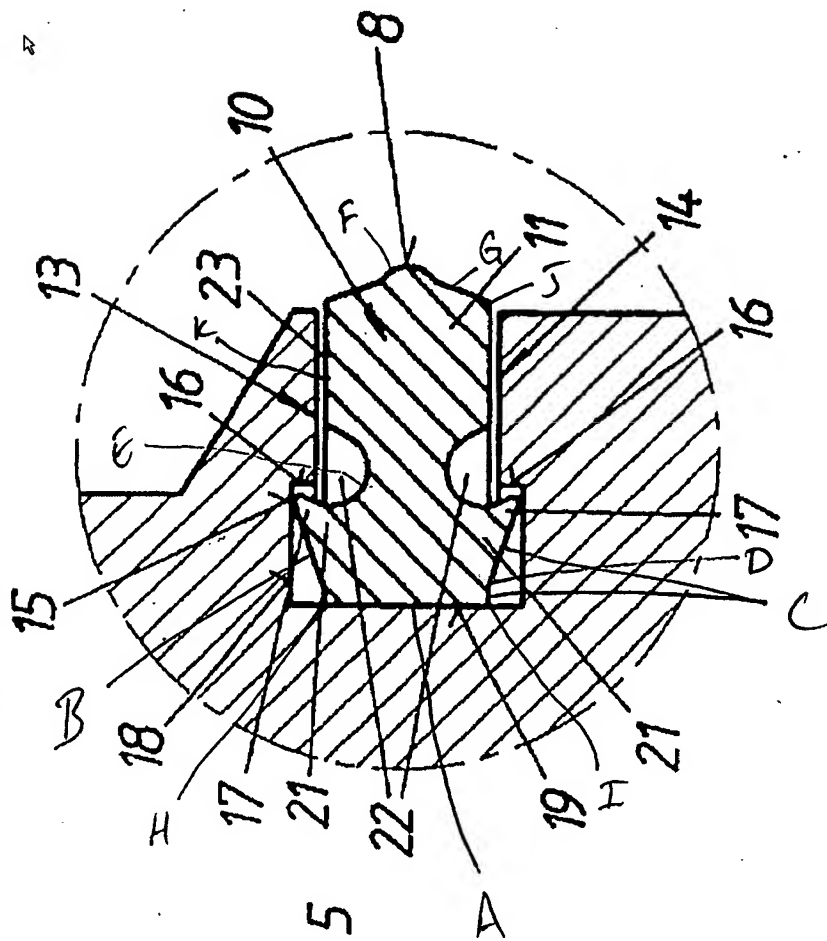


FIG. 2.

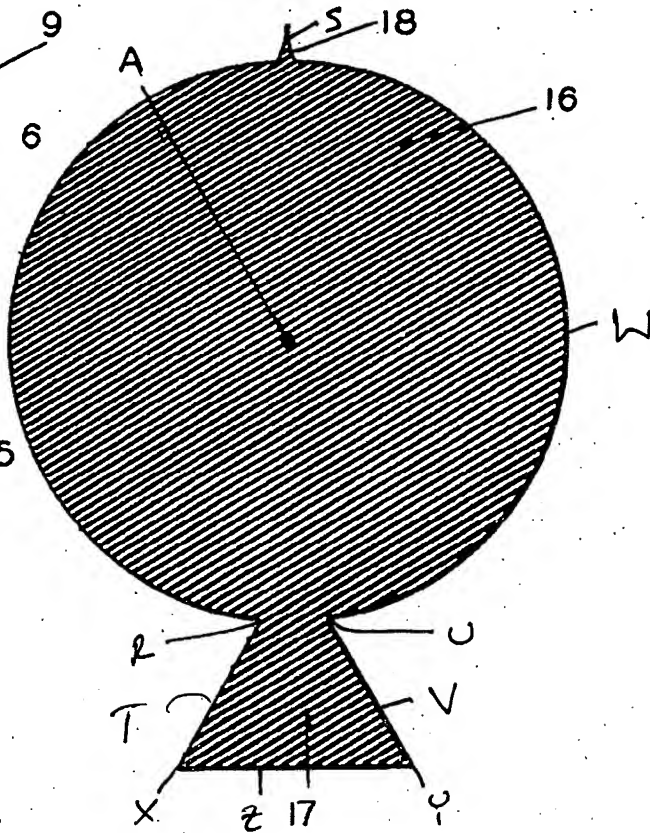
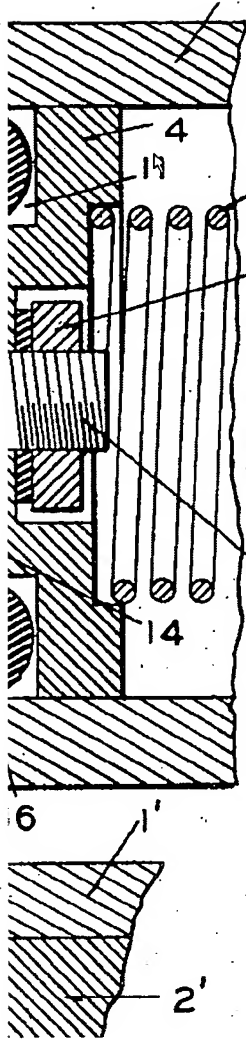


FIG. 3